

device 47 in association with each voice packet (e.g., P1) that constitutes a queue. Each voice packet may be assigned to each importance in the form of hardware or in the form of software.

In this embodiment, there is a need to set the importance M1 prior to the deletion of the voice packet that constitutes the queue in the buffer memory 32A.

A frame in the interior of each voice packet P1 to P102 shown by the dotted line in Fig. 7 is a part where the importance is stored, and numerals 1 to 3 in the frames indicate the importance.

The importance is classified into three grades in this embodiment. The larger the grade numeral is, the higher the "likeness degree to voice presence" of voice data contained in a corresponding voice packet is. The importance is set (written) in the buffer memory 32A in accordance with an importance setting signal M1 output by the importance setting device 47.

The importance setting device 47 receives the supply of a scanning signal SC1 from the scanning reader 31, and thereby detects the coming of importance-setting timing with which importance is set. Like the scanning signal SC of the first embodiment, the scanning signal SC1 is a signal constructed by each voice packet that constitutes a queue at that time.

The scanning signal SC1 is supplied from the importance setting device 47 to the voice presence/absence

judging device 51, and the voice presence/absence judging device 51 returns a three-grade judgment result DC1 for each voice packet to the importance setting device 47.

The importance setting device 47 that has received the judgment result DC1 outputs the importance setting signal M1 that corresponds to the judgment result DC1, and sets the importance M1.

Thereafter, when the voice packet is deleted, the scanning reader 31 reads the importance M1 assigned to each voice packet (in Fig. 7, P1 to P102) as a scanning signal SC2, and supplies it to the packet deleting device 50.

The packet deleting device 50 executes the deletion based on the importance M1. Generally, even a voice packet whose packet importance is relatively high is deleted when the number of stored packets is large, and the queue length is longer than the higher threshold TH, whereas no voice packet is deleted when the queue length is shorter than the higher thresholds TH.

The packet deleting device 50 outputs the control signal C5 so that the position of a voice packet to be deleted is dispersed on a queue as non-consecutively as possible and so that a voice packet as low in importance as possible is deleted.

The deleting timing in this embodiment can be the same as that in the first embodiment, and the importance-setting timing is carried out in the same way as the deleting timing (i.e., importance is set when the queue length

exceeds the higher threshold TH, for example, and deletion is carried out immediately after the importance is set), or, alternatively, the importance-setting timing is carried out earlier than the deleting timing.

In Fig. 7, a control signal C10 output from the scanning reader 31 serves to read the scanning signal SC1, and the control signal C1 serves to read the scanning signal SC2.

(B-2) Effect of the second embodiment

According to this embodiment, the same effect as that of the first embodiment can be obtained.

In addition, since a voice packet to be deleted is determined by the use of the three-grade importance in this embodiment, the occurrence frequency and level of deterioration in sound quality caused by the deletion can be reduced, and the quality of the decoded voice output obtained after the deletion is higher than that of the first embodiment in which only the two-phase judgment criterion (i.e., voice presence and voice absence) is used.

Further, a packet with relatively high importance (e.g., packet with importance 2) is also deleted when the number of stored packets is considerably larger than the higher threshold, for example, and only a packet with low importance is deleted when the number thereof is slightly larger. Therefore, since the importance of a packet to be deleted can be changed in accordance with the largeness of the number of stored packets with respect to the higher